

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A defect repair method ~~for repairing defects occurring on one and the same component~~, in particular for repairing quartz defects on alternating phase shift masks, for repairing one and the same defect, the method comprising:

performing defect repair method steps substantially based on etching processes; and
performing defect repair method steps substantially based on mechanical processes
thereafter; and

performing defect repair method steps substantially based on etching processes
wherein the step of performing repair method steps substantially based on etching
processes includes processing the defect in a central region of the defect to completely remove
the defect in the central region and processing the defect in an edge region of the defect to
partially remove the defect in the edge region,

wherein in the edge region in relation to the original height of the defect, between 20%
and 50% of the defect is not removed prior to the step of performing defect repair method steps
substantially based on mechanical processes.

Claim 2 (currently amended): The defect repair method according to claim 1, wherein the defect repair method steps ~~that are~~ substantially based on mechanical processes are nanomachining method steps.

Claim 3 (currently amended): The defect repair method according to claim 2, wherein the defect repair method steps ~~that are~~ substantially based on etching processes comprise gas injection method steps.

Claim 4 (currently amended): The defect repair method according to claim ~~1~~3, wherein the defect repair method steps ~~that are~~ substantially based on etching processes comprise a step of

emitting ion beams.

Claim 5 (currently amended): The defect repair method according to claim 4, wherein the defect repair method steps ~~that are~~ substantially based on etching processes include FIB (Focused Ion Beam) method steps.

Claim 6 (canceled)

Claim 7 (currently amended): The defect repair method according to claim 1, wherein ~~at least one of the defects are~~ is one of: a quartz defects or and a quartz bumps.

Claim 8 (canceled)

Claim 9 (currently amended): The defect repair method according to claim ~~8~~1, wherein during the step of performing defect repair method steps substantially based on etching processes~~method steps that are performed first that are substantially based on etching processes,~~ a ~~first-second~~ defect is not repaired ~~or only partially repaired, or is not to be repaired or only partially to be repaired, respectively,~~ at an edge region.

Claim 10 (canceled)

Claim 11 (currently amended): The defect repair method according to claim ~~9~~21, wherein at least 20% of the ~~first-second~~ defect is ~~left-not removed~~ at the edge region during the step of performing defect repair method steps ~~that are performed first that are~~ substantially based on etching processes.

Claim 12 (currently amended): The defect repair method according to claim 9, wherein at least 50% of the ~~first-second~~ defect is ~~left-not removed~~ at the edge region during the step of performing defect repair method steps ~~that are performed first that are~~ substantially based on

etching processes.

Claim 13 (currently amended): The defect repair method according to claim 11, wherein the edge region of the ~~first~~second defect, which had ~~first~~ not been repaired ~~or had been repaired partially only~~, is, at least partially repaired during the subsequently performed defect repair method steps ~~that are~~ substantially based on mechanical processes.

Claims 14-17 (canceled)

Claim 18 (currently amended): The defect repair method according to claim 1, wherein the defect repair method steps ~~that are~~ substantially based on etching processes comprise gas injection method steps.

Claim 19 (currently amended): The defect repair method according to claim 1, wherein the defect repair method steps ~~that are~~ substantially based on etching processes comprise a step of emitting ion beams.

Claim 20 (currently amended): The defect repair method according to claim 1, wherein the defect repair method steps ~~that are~~ substantially based on etching processes include FIB (Focused Ion Beam) method steps.

Claim 21 (new): The defect repair method according to claim 1, wherein during the step of performing defect repair method steps substantially based on etching processes, a second defect is only partially repaired at an edge region.

Claim 22 (new): The defect repair method according to claim 21, wherein the edge region of the second defect, which had been only partially repaired, is at least partially repaired during the subsequently performed defect repair method steps substantially based on mechanical processes.

Claim 23 (new): A method for repairing quartz defects on alternating phase shift masks comprising:

etching away an inner portion of a quartz defect on an alternating phase shift mask completely;

etching away an edge region of the quartz defect to remove between 30% and 80% of the edge region; and

mechanically removing the remaining 20% to 70% of the edge region of the quartz defect.

Claim 24 (new): The method of claim 23, wherein the step of etching away an edge region of the quartz defect includes etching away the edge region of the quartz defect to remove between 50% and 70% of the edge region and the step of mechanically removing includes mechanically removing the remaining 30% to 50% of the edge region of the quartz defect.

Claim 25 (new): The method of claim 23, wherein the steps of etching away including emitting ion beams to the inner portion and the edge portion.